REMARKS

Claims 1-10 are active in the present application. Claims 1-3, 6, 7 and 8 are amended for clarification. Support for the hybridization and homology recited in Claims 9 and 10 is found on pages 25, line 25 to page 26, line 8. No new matter is believed to be added by these amendments.

Applicants wish to thank Examiner Kerr for the helpful suggestions provided throughout the Official Action. In view of the amendments submitted herein and the following remarks, favorable reconsideration and allowance of all pending claims is requested.

The rejection of Claims 1-7 under 35 U.S.C. § 112, first paragraph (written description) is traversed.

The Examiner asserts that the specification does not disclose a species of the bacteria recited in the present claims based on the disclosure of three PBP genes present in the bacteria. First, Applicants note that the present claims have been amended to recite **a** penicillin binding protein.

The specification discloses coryneform bacteria on pages 6-8. On page 8, lines 7-22 specification discloses the PBP genes: PBP1, PBP2, and PBP3 with molecular weights of 110, 100 and 60 kDa, respectively. On pages 35-36, the specification discloses a bacteria that has had the PBP gene disrupted. The claims are drawn to methods of producing L-glutamic acid by culturing a coryneform bacteria where a PBP is not produced or the function is reduced or eliminated is adequately described under the meaning of 35 U.S.C. § 112, first paragraph.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1-2 and 4-7 under 35 U.S.C. § 112, first paragraph (enablement) is traversed.

As noted in the discussion of the "written description" rejection, the specification discloses the coryneform bacteria, PBP genes and PBP mutant bacteria. In addition, the specification discloses methods of producing mutant bacteria or PBP on page 11, line 8 to page 12, line 3, deletion of a gene on the bacterial chromosome on page 16, line 19 to page 17, line 21; and also an example of such bacteria on pages 35-36 (Example 4).

Therefore, Claims 1-2 and 5-7 are enabled under the meaning of 35 U.S.C. § 112, first paragraph and as such withdrawal of this ground of rejection is requested.

The objection to the specification is addressed by the submission of the substitute Abstract herewith.

The objections to Claims 1-4 is obviated by amendment.

The objections to Claims 6-7 and 8-9 are obviated by amendment.

The objections to Claim 8-9 are obviated by the amendment.

The rejection of Claims 1-2 and 4-7 under 35 U.S.C. § 112, second paragraph is believed to be obviated by the clarifying amendments submitted herein.

The rejection of Claims 2-4 under 35 U.S.C. § 112, second paragraph is obviated by amendment.

The rejection of Claim 3 under 35 U.S.C. § 112, second paragraph is obviated by amendment

The rejection of Claim 4 under 35 U.S.C. § 112, second paragraph is obviated by amendment.

The rejection of Claim 8 under 35 U.S.C. § 112, second paragraph is obviated by amendment.

The rejection of Claim 9 under 35 U.S.C. § 112, second paragraph is obviated by amendment.

The rejection of Claim 9 under 35 U.S.C. § 112, second paragraph is obviated by amendment.

The rejection of Claim 4 under 35 U.S.C. § 112, first paragraph is obviated by amendment.

The rejection of Claims 8 and 9 under 35 U.S.C. § 112, first paragraph is obviated by amendment.

The rejection of Claim 4 under 35 U.S.C. § 112, first paragraph is obviated by amendment.

The rejection of Claims 8-9 under 35 U.S.C. § 102(b) over Cole et al (References U and V) is obviated by amendment.

Cole et al do not disclose SEQ ID NO:2, SEQ ID NO:1, or those DNA that hybridize under the stringent conditions recited in the present claims because Cole et al disclose a sequence with 22% identity to SEQ ID NO:1.

Withdrawal of this ground of rejection is requested.

Applicants submit that the present application is now in a condition for allowance.

Early notice of such allowance is requested.

Respectfully submitted,

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IN THE SPECIFICATION

Page 42 (Abstract), please replace the Abstract in its entirety with the attached substitute Abstract.

IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) A method for producing L-glutamic acid, comprising the steps of cultivating a coryneform bacteria [bacterium] in a liquid medium to produce and accumulate L-glutamic acid in the medium, and collecting the L-glutamic acid, wherein a penicillin binding protein (PBP) is not produced or the function of a penicillin binding protein is reduced or eliminated in said bacteria due to a mutation in said produced penicillin binding protein [does not normally function in said bacterium] and said bacteria have [bacterium has] the ability to produce L-glutamic acid.

2. (Amended) The method according to claim 1, wherein the coryneform bacteria [bacterium] are bacteria [is a bacterium] in which a penicillin binding protein is produced or the function of a penicillin binding protein is not reduced or eliminated [functions normally] at a [the] first temperature and a penicillin binding protein is not produced or the function of a penicillin binding protein is reduced or eliminated because of a mutation in said produced penicillin binding protein [does not function normally] at a [the] second temperature,

comprising the steps of cultivating the bacteria [bacterium] at the first temperature to proliferate the bacteria [bacterium], and cultivating the bacteria [bacterium] at the second temperature to produce L-glutamic acid.

3. (Amended) The method according to claim 2, wherein the coryneform bacteria [bacterium] are bacteria [is a bacterium] which harbor [harbors] a plasmid comprising a gene coding for a penicillin binding protein [PBP gene] and a temperature sensitive replication control region, and in which [the] said PBP gene on the bacterial chromosome does not function, and the plasmid can replicate at the first temperature, and cannot replicate at the second temperature.

6. (Amended) The method according to claim 1, wherein the penicillin binding protein has the amino acid sequence shown in SEQ ID NO:2 [in Sequence].

7. (Amended) The method according to claim 3, wherein the PBP gene has a nucleotide sequence comprising at least [the sequence of the nucleotide numbers] nucleotides 881 to 2623 of SEQ ID NO:1 [in Sequencing Listing].

8. (Amended) A DNA which codes for a protein [defined in the following (A) or (B): (A) a protein] which has the amino acid sequence of SEQ ID NO:2 [in Sequence Lising; (B) a protein which has an amino acid sequence in SEQ ID NO:2 in Sequence Listing including substitution, deletion, insertion, addition, or inversion of one or several amino acids, and an activity for binding to penicillin].

9. (Amended) [The] A DNA derived from coryneform bacterium, said DNA is [according to claim 7, which is DNA] defined in the following (a) or (b):

(a) a DNA which comprises at least [the nucleotide sequence of the nucleotide numbers] nucleotides 881 to 2623 of SEQ ID NO:1 [in Sequence Listing];

(B) a DNA which is hybridizable with a nucleotide sequence comprising at least [the sequence of the nucleotide numbers] nucleotides 881 to 2623 of SEQ ID NO:1 [in Sequence Listing] under a stringent condition, which comprises washing at 60°C in 1 X SSC and 0.1% SDS, and wherein said DNA codes for a protein having the ability to bind [an activity for binding] to penicillin.

Claim 4 (canceled).

Claim 10 (New).